Application No. 10/528,797

Amendment dated March 17, 2006

Reply to Office Action of November 29, 2005

### **AMENDMENTS TO THE DRAWINGS**

Docket No.: 21029-00288-US1

The attached sheet(s) of drawings includes changes to Figure 1.

Attachment: Replacement sheet (1)

#### **REMARKS**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Office Action and prior art relied upon have been carefully considered. Claims 1 and 2 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Claims 1 and 2 were rejected on the bases of 35 U.S.C. § 102(e) and 35 U.S.C. § 102(b) as will be discussed hereinafter.

In an effort to expedite the prosecution, original claims 1 and 2 have been canceled and corresponding claims 3 and 4 are submitted herewith for the Examiner's consideration. The claims are considered to be clear of vague and indefinite terms so that further rejection on the basis of 35 U.S.C. § 112, second paragraph, is not anticipated. Claim 1 has been redrafted so as to correspond with the recycling method as illustrated in Fig. 1.

A drawing change to Fig. 1 accompanies this amendment and corrects an error introduced in Fig. 1 so that the outlet line 5 is no longer erroneously illustrated as directly connected to the membrane 3. Rather, the corrected version of Fig. 1 corresponds to Fig. 2 and the description as originally filed.

Claims 1 and 2 were rejected under 35 U.S.C. § 102(e) as being anticipated by USP 6872312. The Examiner is advised that Applicants may rely upon the benefit of priority to overcome this rejection. The issued patent was filed January 15, 2003, before the date (September 23, 2003) of the international application (PCT/FR2003/002796) which corresponds to the present application.

However, the international application is based upon the French priority of September 24, 2004 (FR 02 11788) which date precedes the filing date of the cited reference. Accordingly, the cited reference is ineffective against the present application. Applicants will provide a verified translation of the priority document to complete its priority claim.

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However, notwithstanding the ineffective date of the reference, Applicants maintain that the rejection under 35 U.S.C. § 102(e) is overcome by the amended claims. In the cited reference, there appears to be no anticipation since the mixed sludge of the reference is derived from bioreactor 2 and flows into reservoir 4 which is designed to maintain a constant age of the sludge. As set forth in column 6 lines 5-7 of the reference, clarified water 8 is discharged from the system and excess activated sludge is pumped out of the bioreactor tank into a sludge holding tank 4 in order to maintain a constant sludge age before being delivered to the dewatering device 6 after injection of a polymer at 5. This is made clear in column 6, lines 5-7, wherein it is stated that "clarified water 8 is discharged from the system and excess activated sludge is pumped out of the bioreactor tank into a sludge holding tank 4 in order to maintain a constant sludge age".

According to the reference, the dewatered effluent is recycled in the bioreactor directly, without being put into contact with biological sludge extracted from the bioreactor (as in the claimed invention) and without passing through a reactor prior to its recycling.

Claims 1 and 2 were also rejected under 35 U.S.C. § 102(b) as being clearly anticipated by USP 5087378. It is Applicants' view that when considering the amended claims, this cited reference strays from the invention since it concerns a process for improving the serviceability of dewatering concentrated sludge, including a stage consisting of pH adjustment, a stage of thermal treatment, and a stage of pH readjustment.

Claims 1 and 2 were further rejected under 35 U.S.C. § 102(b) as being anticipated, alternatively, by JP 11-057799 or WO 98/49108.

In connection with the Japanese reference, it should be pointed out that the subject matter is directed to the elimination of the flocculation agent 22 of the effluent that flows from the sludge dewatering device 14 before recycling. This process differs from the invention in a number of respects:

1) Elimination of flocculation agent 22 is assured by a biodegradation in a second bioreactor 16;

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- 2) There is no mention of the use of membranes in the bioreactor 16, the description similarly being silent regarding the separation of sludge-liquid at the level of reactor 16;
- 3) The flow of sludge from reactor 16 does not constitute supplying the sludge dewatering device 14, contrary to the intended solution of the present invention.

Regarding the WO 98/49108 reference, it does not describe a process for utilizing membranes, and does not provide for the elimination of flocculation agent in recycled effluent. The reference concerns the treatment of sludge, and more particularly, the control of fluids in the plant.

In the WO reference, the excess sludge associated with stage 4, for a first part, are recycled in reactor 3 and, for another part, are delivered directly to the dewatering tank after introduction of a polymer (5, 7).

In fact, the dewatering reactor 5 is of classic design, the filtrant forming from reactor 5 is recycled without treatment, and without passage to a reactor as is claimed in the present invention.

The filtrant of the dewatering stage is in part recycled in the dewatering station. However, this part of the filtrant is not subjected to any treatment and is not passed on to the reactor by means of a recycling loop. The dewatering tank is feed by biological sludge and a fraction of the filtrant. This is quite distinct from the presently claimed invention.

For the reasons set forth herein, Applicants believe that the claims as amended set forth distinctions that are not met by any of the references, taken individually or even in any reasonable combination. Accordingly, presently submitted claims 3 and 4 are believed to be allowable.

In view of the above, consideration and allowance are, therefore, respectfully solicited.

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In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Director is hereby authorized to charge any fees, or credit any overpayment, associated with this communication, including any extension fees, to CBLH Deposit Account No. 22-0185, under Order No. 21029-00288-US1 from which the undersigned is authorized to draw.

Dated: March 28, 2006

Respectfully submitted,

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Attachments

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